

METHODS AND APPARATUS PROVIDING REMOTE OPERATION  
OF AN APPLICATION PROGRAMMING INTERFACE

5

ABSTRACT OF THE DISCLOSURE

10 A system can analyze an application programming interface definition to  
automatically produce software string generator and parser software components  
allowing remote access to functions within the application programming interface  
definition by processes that are not natively compatible with the computing system  
environment in which the application programming interface operates. A first string  
generator processes can produce an encapsulated function call from a first process, such  
as a Java-based process, that calls a first function in a first computing environment. A  
second parser process operates in a second computing environment to receive the  
15 encapsulated function call and to invoke a second function call in a second process, such  
as a C-based process. Results from the second function call are returned to a second  
string generator which produces an encapsulated response that is returned to a first parser  
process. The first parser process maps the encapsulated response back into first function  
call parameters for return to the first process, thus providing access to second functions of  
20 the application programming interface by the first process.